

Listing of Claims

1. (currently amended) A method for starting an internal combustion engine with electrically actuated valves, the method comprising:

from a plurality of engine starting positions:

identifying a cylinder with sufficient piston downward movement to produce an engine output; and

setting intake and exhaust valve timing **of at least one electrically actuated valve** so that said cylinder is in an intake stroke.

2. (original) The method of Claim 1 wherein said cylinder is a first available cylinder with sufficient piston downward movement to produce an engine output.

3. (original) The method of Claim 1 wherein said engine output is a desired engine torque.

4. (original) The method of Claim 1 wherein said engine output is a desired cylinder air amount.

5. (original) The method of Claim 1 wherein said engine output is a desired engine speed.

6. (currently amended) A method for starting an internal combustion engine with electrically actuated valves, the method comprising:

during a start, identifying at least a piston position and direction of travel in at least a cylinder of said engine; and

setting electrically actuated intake and exhaust valves so that said at least a cylinder is in a desired stroke.

7. (previously presented) The method of Claim 6 wherein said setting intake and exhaust valves is further based on engine speed.

8. (previously presented) The method of Claim 6 wherein said setting intake and exhaust valves is further based on barometric pressure.

9. (previously presented) The method of Claim 6 wherein said desired stroke is an intake stroke.

10. (previously presented) The method of Claim 6 wherein said desired stroke is an exhaust stroke.

11. (previously presented) The method of Claim 6 wherein said desired stroke is a compression stroke.

12. (previously presented) The method of Claim 6 wherein said desired stroke is a power stroke.

13. (currently amended) A method for starting an internal combustion engine with electrically actuated valves, the method comprising:

during a start and from a plurality of engine starting positions, identifying a cylinder with sufficient piston upward movement to produce an engine output; and
setting electrically actuated valve intake and exhaust valves timing so that said cylinder is in a compression stroke.

14. (previously presented) The method of Claim 13 wherein said setting intake and exhaust valves is further based on engine speed.

15. (original) The method of Claim 13 wherein said engine output is a desired engine torque.

16. (original) The method of Claim 13 wherein said engine output is a desired cylinder air amount.

17. (original) The method of Claim 13 wherein said engine output is a desired engine speed.

18. (currently amended) A method for starting an internal combustion engine with electrically actuated valves, the method comprising:

determining position of said engine;

determining a desired cylinder air amount based on at least an operating condition of said engine; and

adjusting valve timing of at least one electrically actuated valve of a cylinder based on said engine position and said desired cylinder air amount.

19. (original) The method of Claim 18 wherein said at least an operating condition of said engine is a temperature of said engine.

20. (original) The method of Claim 18 wherein said at least an operating condition of said engine is a temperature of ambient air.

21. (original) The method of Claim 18 wherein said at least an operating condition of said engine is a desired engine torque amount.

22. (original) The method of Claim 18 said adjusting valve timing includes setting the stroke of said cylinder.

23. (currently amended) A computer readable storage medium having stored data representing instructions executable by a computer to control an internal combustion engine of a vehicle, said storage medium comprising:

instructions for identifying a cylinder sufficient piston downward movement to produce an engine output ;

instructions for setting intake and exhaust valve timing of at least one electrically actuated valve so that said cylinder is in an intake stroke; and

instructions for performing a first combustion event in said cylinder with said set intake stroke.

24. (previously presented) The method of Claim 1 wherein said electrically actuated valve is an electromechanically actuated valve.

25. (previously presented) The method of Claim 6 wherein said electrically actuated valve is an electromechanically actuated valve.

26. (previously presented) The method of Claim 13 wherein said electrically actuated valve is an electromechanically actuated valve.

27. (previously presented) The method of Claim 18 wherein said electrically actuated valve is an electromechanically actuated valve.

28. (previously presented) The method of Claim 6 wherein said piston position is based on a determined crankshaft position.

29. (previously presented) The method of Claim 6 wherein said piston direction of travel is away from a cylinder head.

30. (previously presented) The method of Claim 6 wherein said piston direction of travel is toward a cylinder head.

Page 6 - RESPONSE TO NOTICE OF NON-COMPLIANT AMENDMENT
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